1. A directionally solidified article comprising a high strength, corrosion and oxidation resistant nickel base superalloy which comprises a matrix and from about 0.4 to 1.5 vol. % of a phase based on tantalum carbide, the alloy consisting essentially of, in weight percent, of: 10 - 13.5% chromium; 8 - 10% cobalt; 1.25 - 2.5% molybdenum; 3.25 - 4.25% tungsten; 4.5 - 6% tantalum; 3.25 - 4.5% aluminum; 3 - 4.75% titanium; 0.0025 - 0.025% boron; up to about 0.05% zirconium; 0.05 - 0.15% carbon; and having no intentional addition of niobium; no intentional addition of hafnium; and balance essentially nickel; wherein aluminum + titanium is between about 6.5 - 8%;
said article having at least comparable hot corrosion resistance (measured at 1600° F.) and at least twice the oxidation resistance (measured at 2000° F) when compared with a directionally solidified having a nominal composition of 14 Cr, 4.9 Ti, 1.5 Mo, 3.8 W, 2.8 Ta, 3 Al, 9.5 Co, 0.01 B, 0.02 Zr, 0.1 C, and balance Ni.

2. The article of claim 1, wherein the article comprises a columnar grain, directionally solidified article.

3. The article of claim 2, wherein the article has transverse ductility in excess of 5% at 1400° F and at 1800° F.

4. The article of claim 1, wherein the article comprises a single crystal article including a high angle boundary of up to at least about 20°.

5. The article of claim 1 having stress rupture resistance sufficient to ensure that a load of about 27 ksi applied ruptures only after more than 45 hours, and also has a time to 1% creep of more than 15 hours, at 1800° F.

6. The article of claim 5, wherein stress rupture occurs only after more than 85 hours.

7. The article of claim 1, having 11 - 13% chromium; 8.25 - 9.75% cobalt; 1.5 - 2.25% molybdenum; 3.4 - 4.3% tungsten; 4.7 - 5.5% tantalum; 3.3 - 4% aluminum; 3.75 - 4.3% titanium; 0.008 - 0.025% boron; up to about 0.04% zirconium; 0.04 - 0.15 carbon; wherein aluminum + titanium is between about 7 - 8%.

8. The article of claim 1, having about 12% chromium; 9% cobalt; 1.9% molybdenum; 3.8% tungsten; 5% tantalum; 3.6% aluminum; 4.1% titanium; 0.015% boron; 0.025% zirconium; 0.10%

carbon; up to about 0.02 Zr and having no intentional addition of niobium; no intentional addition of hafnium; balance essentially nickel.

9. The article of claim 1, wherein the article comprises a gas turbine engine component.

10. The article of claim 9, comprising a turbine blade or vane.

11. The article of claim 1, further characterized by oxidation resistance at 2000° F of roughly 2.5X, and creep rupture life at 1400° F of roughly 2.4X and at 1800° F of at least roughly 1.5X a similar article having a nominal composition of 14 Cr, 4.9 Ti, 1.5 Mo, 3.8 W, 2.8 Ta, 3 Al, 9.5 Co, 0.01 B, 0.02 Zr, 0.1 C, and balance Ni.

12. A high strength, corrosion resistant, nickel base superalloy adapted for use in columnar grain directionally solidified articles, comprising in weight percent of about 12 % chromium; 9 % cobalt; 1.9 % molybdenum; 3.8 % tungsten; 5 % tantalum; 3.6 % aluminum; 4.1 % titanium; 0.015 % boron; 0.1% carbon; and having no intentional addition (and in any event less than about 0.02) zirconium and no intentional amount of niobium; balance essentially nickel and incidental impurities, and wherein aluminum + titanium is between about 6.5 - 8 %; and including a matrix containing from about 0.4 to 1.5 vol. % of a phase based on tantalum carbide, the article is characterized by oxidation resistance at 2000° F of roughly 2.5X and creep rupture life at 1400° F of roughly 2.4X compared to a similar article having a nominal composition of 14 Cr, 4.9 Ti, 1.5 Mo, 3.8 W, 2.8 Ta, 3 Al, 9.5 Co, 0.01 B, 0.02 Zr, 0.1 C, and balance Ni.

13. The alloy of claim 9, comprising a gas turbine engine component.

14. The article of claim 13, comprising a turbine blade or vane.